

CLAIMS

1. Device for determining the level of an input signal (101) intended to be applied to a receiving system (TUN), said receiving system (TUN) comprising arranged in series a set of discrete gain amplifiers (102-103-105-107), a selective filter (104), a mixer (106), said receiving system (TUN) being intended to deliver an output signal (108), said
5 device comprising :
- measuring means (116) for measuring the level of said output signal (108) in a given frequency channel,
 - means (120) for determining the real gain (G1) of said set of amplifiers (102-103-105-107) in said given frequency channel,
 - 10 - means (121) for determining the real gain (G2) of said selective filter (104) in said given frequency channel,
 - calculation means (122) for deriving the level of the input signal (101) from the level of the output signal (108), the real gain (G1) of said set of amplifiers (102-103-105-107) and from the real gain (G2) of said selective filter (104).
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2. Device as claimed in claim 1 where the real gain (G2) of said selective filter (104) is given by a set of equations defined by a set of coefficients depending on said frequency channel.
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3. Device as claimed in claim 2 comprising additional means for averaging the level of said output signal (108).
4. Device as claimed in claim 3 comprising additional means for rounding the level of said input signal (101) to the nearest half value.
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5. Device as claimed in claim 4 where the real gain (G1) of said set of amplifiers (102-103-105-107) is given by a look-up table with two inputs, a first input corresponding to

said given frequency channel, a second input corresponding to the nominal gain of said amplifiers.

6. Device as claimed in claim 5 where said measuring means (116) comprise
5 arranged in series a selective filter (117) for selecting said given frequency channel, a logarithmic detector (118) and an analog-to-digital converter (ADC) for delivering the level of said output signal (108) in said given frequency channel.

7. Method for determining the level of an input signal (101) intended to be
10 applied to a receiving system (TUN), said receiving system (TUN) comprising arranged in series a set of discrete gain amplifiers (102-103-105-107), a selective filter (104), a mixer (106), said receiving system (TUN) being intended to deliver an output signal (108), said method comprising :

- 15 - a measuring step (201) for measuring the level of said output signal (108) in a given frequency channel,
- a processing step (203) for determining the real gain (G1) of said set of amplifiers (102-103-105-107) in said given frequency channel,
- a first calculation step (204) for determining the real gain (G2) of said selective filter (104) in said given frequency channel,
- 20 - a second calculation step (205) for deriving the level of the input signal (101) from the level of the output signal (108), from the real gain (G1) of said set of amplifiers and from the real gain (G2) of said selective filter (104).

8. Receiving box for multimedia signals, or modem comprising a device as
25 claimed in anyone of claim 1 to 6.

9. Signal generated by the method as claimed in claim 7, said signal indicating the level of the input signal (101).

30 10. Computer program comprising instruction codes for executing one or a plurality of steps of the method as claimed in claim 7.